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Derwent Record

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Derwent Title: **Hydrophilising agent for synthetic fibres, esp. acrylonitrile - contains polymeric pyrrolidinium salt, ethoxylated betaine cpd and ethoxylated sulphobetaine sulphinate or sulphonate**

Original Title: DE4316666C1: Hydrophilierungsmittel

Assignee: **MAERKISCHE FASER PREMNITZ AG** Non-standard company
BALLSCHUH D Individual
ENGELBRECHT L Individual
OHME R Individual
SEIBT H Individual

Inventor: **BALLSCHUH D; ELLMANN R; ENGELBRECHT L; OHME R; SCHMIDT B; SCHOENING K; SEIBT H;**

Accession/
Update: **1995-007368 / 199502**

IPC Code: **D06M 15/356 ; C04B 16/06 ; D06M 13/244 ; D06M 15/53 ;**

Derwent Classes: **A87; E16; F06; L02; A14;**

Manual Codes: **A04-B(Others) , A04-D02B(Fibres, textiles) , A08-S02 (Solvents; swelling agents) , A08-S08(Absorption agents; repellance agents) , A10-E01(General) , A12-S05S(Antistatic, surfactant, softener or lubricant treatments) , E10-A09B8(no ring(s) present) , E10-A22D(No Aromatic ring - with acid (derivative)) , F01-D02(Acrylic and modacrylic fibres) , F03-D04(Fabric structures designed for reinforcement of solid materials) , L02-D05(Reinforced and pre-stressed concretes)**

Derwent Abstract: **(DE4316666C) A hydrophilising agent (I) for the treatment of synthetic fibres, esp. reinforcing and process fibres based on polyacrylonitrile (PAN) for use in hydraulic binders, comprises (A) 4-12 wt.% polymeric pyrrolidinium salt, (B) 4-13 wt.% ethoxylated alkyl- or dialkyl-ammonium betaine and (C) 4-7 wt.% alkyl-bis-(polyoxyethylene)-ammonium-sulphobetaine sulphinate and/or sulphonate as main components in the mole ratio 1:1:1, together with (D) 1-5 wt.% non-ionic surfactant, (E) 5-10 wt.% low-mol. wt. alcohol or diol, (F) 0.05-2 wt.% foam inhibitor and (G) 0.05-2 wt.% auxiliary film former, made up to 100 wt.% with water.**

Use - Used esp. for the modification of PAN fibres for use as reinforcement in building materials, friction linings, etc.

Advantage - Enables the hydrophilic properties of synthetic fibre to be modified independently of the intended matrix (cement, etc.). The hydrophilising film is deposited from dil. aq. soln. as a complex which can then form a silicate film which also protects the fibre surface from the alkali in the binder.

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| Family: | PDF Patent | Pub. Date | Derwent Update | Pages | Language | IPC Code |
| | <input checked="" type="checkbox"/> | <u>DE4316666C1</u> | * 1994-12-08 | 199502 | 6 | German D06M 15/356 |

Local appls.: DE1993004316666 Filed:1993-05-13 (93DE-4316666)

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Legal Status:

First Claim: [Show all claims](#) 1. Hydrophilierungsmittel zur Ausrüstung von Synthesefasern für technische Einsatzgebiete, insbesondere von Armierungs- und Prozeßfasern auf Acrylnitrilbasis, für den Einsatz in hydraulischen Bindern, bestehend aus 4 bis 12 Gew.-% eines polymeren Pyrrolidiniumsalzes, 4 bis 13 Gew.-% eines oxethylierten Alkyl- oder Dialkylammoniumbetrains sowie 4 bis 7 Gew.-% eines Alkyl-bis(polyoxyethylen)-ammoniumsulfobetain-sulfinats und/oder -sulfobetain-sulfonats als Hauptkomponenten und 1 bis 5 Gew.-% eines nichtionischen Tensids, 5 bis 10 Gew.-% eines niedermolekularen Alkohols oder Diols, 0,05 bis 2 Gew.-% eines Schauminhbitors, 0,05 bis 2 Gew.-% eines unterstützenden Filmbildners und Ausgleich auf 100 Gew.-% mit Wasser, wobei die Hauptkomponenten im Molverhältnis 1 : 1 : 1 vorliegen.

 Priority Number:

| Application Number | Filed | Original Title |
|--------------------|------------|------------------------|
| DE1993004316666 | 1993-05-13 | HYDROPHILIERUNGSMITTEL |

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Title Terms: HYDROPHILIC AGENT SYNTHETIC FIBRE ACRYLONITRILE CONTAIN POLYMERISE PYRROLIDINIUM SALT ETHOXYLATION BETAINE COMPOUND ETHOXYLATION SULPHINATE SULPHONATE

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